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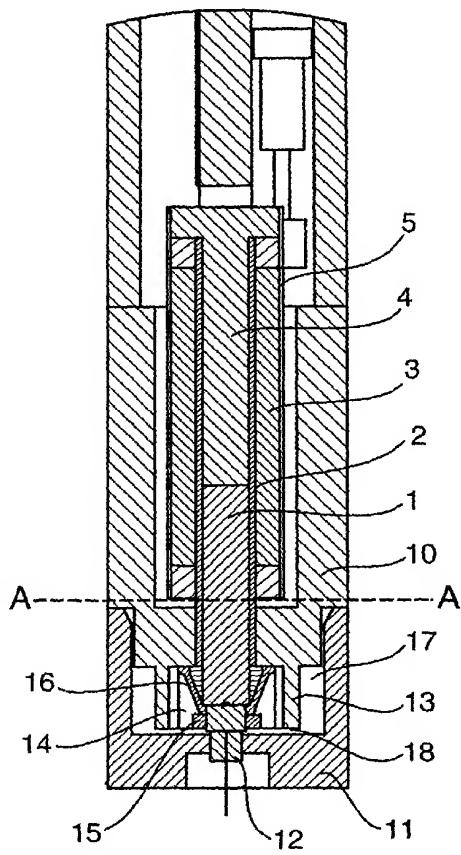
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(54) Title: SOLENOID VALVE

(57) Abstract: The invention relates to a solenoid valve made using certain materials which is capable of operation at high frequencies and which can be made as a compact unit. The plunger (1) is made from an electromagnetic material having a saturation flux density greater than 1.2 Teslar preferably more than 1.6 Teslar, the bore leading from the valve head chamber (14) to the nozzle orifice (12) has a length to diameter ratio of less than 5:1 preferably between 2:1 and 4:1 and the nozzle orifice (12) has a diameter of 80 micrometer or less. The invention also relates to method for operating a drop on demand ink jet printer incorporating such a valve.



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